

Best Available Copy



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AmJ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/118,824	07/20/98	LEE	

J

002292 TM11/1023
BIRCH STEWART KOLASCH & BIRCH
P O BOX 747
FALLS CHURCH VA 22040-0747

EXAMINER	
TRAN, T	
ART UNIT	PAPER NUMBER

2615

DATE MAILED: 10/23/00

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/118,824

Applicant(s)

Lee et al

Examiner

ThaiTran

Group Art Unit

2615

☒ Responsive to communication(s) filed on Aug 11, 2000☒ This action is **FINAL**.☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-31, 33-50, and 52-61 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 1-22 is/are allowed.
- ☒ Claim(s) 23-31, 33-50, and 52-61 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☒ received in Application No. (Series Code/Serial Number) 08/227,281.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2615

DETAILED ACTION

1. For any written or facsimile communication submitted on or after Oct. 1, 2000, the Examiner, who was assigned to Art Unit 2715, will be assigned to Art Unit 2615. Please include the new Art Unit in the caption or heading of any communication submitted after Oct. 1, 2000. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

Response to Arguments

2. Applicant's arguments with respect to claims 1-31, 33-50 and 52-61 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

Art Unit: 2615

and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 23-24, 26-31, 33-39, 42-43, 45-50, 52-57 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi et al ('008) in view of Enokida ('393).

Yamagishi et al discloses an apparatus for jump-reproducing video data of moving picture coded with high efficiency having an input unit (column 17, line 61 to column 18, line 43) for receiving digital video data; data generating circuit (column 17, line 61 to column 18, line 43) for generating a plurality of relative position data, each of the plurality of relative position data associated with one of a plurality of specific data in the received digital video data and indicative of plurality of relative position from a current specific data location to each of a plurality of specific data location; a recording unit (column 17, line 61 to column 18, line 43) coupled to the data generating circuit and recording the digital video data and the plurality of relative position data on a digital medium such that each specific data includes the associated relative position data as recited in claims 23, 42 and 60; a reproducing unit (30 of Fig. 9) for reproducing digital data stored on a digital medium the digital data including a plurality of specific data, each of the plurality of specific data including relative position data, each relative position data indicative of a plurality of relative positions from a current specific data location to each of a plurality of specific data locations; a detection circuit (80 of Fig. 9) coupled to the reproducing unit and detecting one of the plurality of relative position data from the reproduced digital data; a control circuit (90 of

Art Unit: 2615

Fig. 9) coupled to the detection circuit, receiving a command and controlling the reproducing unit to reproduce at least another specific data based on the detected relative position data and the command as recited in claims 33 and 52; wherein the specific data is I-frame data (column 17, line 61 to column 18, line 43) as recited in claims 24, 31, 35, 43, 50, 54 and 61; wherein the digital medium includes a magnetic medium (column 9, lines 27-42) as recited in claims 26 and 45; wherein each of the plurality of relative position data includes a plurality of distance indicators, each distance indicator indicating a distance between the current specific data location and one of the specific data locations (columns 15-16) as recited in claims 27, 36, 46 and 55; wherein the distance is represented with a number of distance units present between the current specific data location and one of the specific data locations (columns 15-16) as recited in claims 28, 37, 47 and 56; wherein the distance unit is a track on the storage medium (column 5, lines 29-65) as recited in claims 29, 38, 48, and 57; formatting circuit (column 17, line 61 to column 18, line 43) for forming a data block associated with each specific data, the data block including the associated relative position data as recited in claims 30 and 49; wherein the reproducing unit includes a motor for moving the digital medium (column 9, lines 27-42) as recited in claim 39; a decoding unit (80 and 90 of Fig. 9) for selecting one of the relative positions represented in the detected relative position data based on the command as recited in claims 34 and 53; a detection circuit (column 17, line 61 to column 18, line 43) coupled to the input unit and detecting specific data from the received digital video data; and wherein the data generating circuit is coupled to the detection circuit (column 5, lines 29-65) as recited in claim 59. However,

Art Unit: 2615

Yamagishi et al does not specifically disclose the newly added limitation that each of specific data indicative of a plurality of relative positions from a current n th specific data location to each of a $n+1$, $n+2$, ..., $n+m$ specific data location, where m is greater than 2 as recited in claims 23, 27-28, 33, 36-37, 42, 46-47, 52, 55-56 and 60.

Enokida teaches, in a moving image processing method and apparatus, specific data indicative of a plurality of relative positions from a current n th specific data location to each of a $n+1$, $n+2$, ..., $n+m$ specific data location, where m is greater than 2 (see columns 10-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the specific data or administrative information as taught by Enokida into Yamagishi et al in order to reproduce all the I-frames of the video signal in the fast playback mode.

5. Claims 25 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi et al ('008) in view of Enokida ('393) as applied to claims 23-24, 26-31, 33-39, 42-43, 45-50, 52-57 and 59-61 above, and further in view of Naimpally ('993).

The proposed combination of Yamagishi et al and Enokida discloses all the features of the instant invention except for providing a timing signal generating circuit for generating a timing control signal and a multiplexer coupled to the timing signal generating circuit and selectively outputting the detected specific data and the digital video data based on the timing control signal as recited in claims 25 and 44.

Naimpally teaches a digital high definition television video recorder with trick-play features having a timing signal generating circuit (328 of Fig. 3) generating a timing control signal

Art Unit: 2615

and a multiplexer (318 of Fig. 3) coupled to the timing signal generating circuit and selectively outputting the signals to be recorded based on the timing control signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide Yamagishi et al's system with the timing signal generating circuit and the multiplexer as taught by Naimpally since it merely amounts to selecting an alternative equivalent recording method.

6. Claims 40-41 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi et al in view of Enokida as applied to claims 23-24, 26-31, 33-39, 42-43, 45-50, 52-57 and 59-61 above, and further in view of Official Notice.

The combination of Yamagishi et al and Enokida discloses all the features of the instant invention except for providing a calculating circuit for calculating a rotational speed of the motor based on the detected relative position data as recited in claims 40 and 58 and wherein the reproducing unit includes reading heads as recited in claim 41.

The capabilities of controlling the rotting of the recording disk by using a calculating circuit calculating a rotational speed of the motor and reproducing data recorded on the recording medium by using reading heads are old and well known in the art and therefore Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to control the rotating of the recording disk by using the well known calculating circuit in order to accurately record/reproduce video signal by controlling the rotating of the recording disk and

Art Unit: 2615

substitute the well known reproducing unit having reading heads for the reproducing unit of Yamagishi et al in order to increase the reproducing speed when reproducing data from the recording medium.

7. Claims 23-24, 27-31, 33-39, 42-43, 46-50, 52-57 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Haan et al ('641) in view of Enokida ('393).

De Haan et al discloses a full-motion video disc with reference information for slow-motion or freeze playback having an input unit (column 4, lines 17-65) for receiving digital video data; data generating circuit (column 5, lines 29-65) for generating a plurality of relative position data, each of the plurality of relative position data associated with one of a plurality of specific data in the received digital video data and indicative of plurality of relative position from a current specific data location to each of a plurality of specific data location; a recording unit (column 5, lines 29-65) coupled to the data generating circuit and recording the digital video data and the plurality of relative position data on a digital medium such that each specific data includes the associated relative position data as recited in claims 23, 42 and 60; a reproducing unit (1 of Fig. 1) for reproducing digital data stored on a digital medium the digital data including a plurality of specific data, each of the plurality of specific data including relative position data, each relative position data indicative of a plurality of relative positions from a current specific data location to each of a plurality of specific data locations (column 5, lines 29-65); a detection circuit (column 4, line 66 to column 5, line 27) coupled to the reproducing unit and detecting one of the plurality of relative position data from the reproduced digital data; a control circuit (column 4, line 66 to

Art Unit: 2615

column 5, line 27) coupled to the detection circuit, receiving a command and controlling the reproducing unit to reproduce at least another specific data based on the detected relative position data and the command as recited in claims 33 and 52; wherein each of the plurality of relative position data includes a plurality of distance indicators, each distance indicator indicating a distance between the current specific data location and one of the specific data locations (column 5, lines 29-65) as recited in claims 27, 36, 46 and 55; wherein the distance is represented with a number of distance units present between the current specific data location and one of the specific data locations (column 5, lines 29-65) as recited in claims 28, 37, 47 and 56; wherein the distance unit is a track on the storage medium (column 5, lines 29-65) as recited in claims 29, 38, 48, and 57; formatting circuit (column 5, lines 29-65) for forming a data block associated with each specific data, the data block including the associated relative position data as recited in claims 30 and 49; wherein the reproducing unit includes a motor for moving the digital medium (column 4, last two lines) as recited in claim 39; a decoding unit (column 4, line 66 to column 5, line 27) for selecting one of the relative positions represented in the detected relative position data based on the command as recited in claims 34 and 53; a detection circuit (column 5, lines 29-65) coupled to the input unit and detecting specific data from the received digital video data; and wherein the data generating circuit is coupled to the detection circuit (column 5, lines 29-65) as recited in claim 59. However, De Haan et al does not specifically disclose the newly added limitation that each of specific data indicative of a plurality of relative positions from a current n th specific data location to each of a $n+1$, $n+2$, ..., $n+m$ specific data location, where m is greater

Art Unit: 2615

than 2 as recited in claims 23, 27-28, 33, 36-37, 42, 46-47, 52, 55-56 and 60 and wherein the specific data is I-frame data as recited in claims 24, 31, 35, 43, 50, 54 and 61.

Enokida teaches, in a moving image processing method and apparatus, specific data indicative of a plurality of relative positions from a current n th specific data location to each of a $n+1$, $n+2$, ..., $n+m$ specific data location, where m is greater than 2 (see columns 10-12) and wherein the specific data is I-frame data (columns 10-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the specific data or administrative information as taught by Enokida into De Haan et al in order to reproduce all the I-frames of the video signal in the fast playback mode.

8. Claims 25 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Haan et al ('641) in view of Enokida ('393) as applied to claims 23-24, 27-31, 33-39, 42-43, 46-50, 52-57 and 59-61 above, and further in view of Naimpally ('993).

The proposed combination of De Haan et al and Enokida discloses all the features of the instant invention except for providing a timing signal generating circuit for generating a timing control signal and a multiplexer coupled to the timing signal generating circuit and selectively outputting the detected specific data and the digital video data based on the timing control signal as recited in claims 25 and 44.

Naimpally teaches a digital high definition television video recorder with trick-play features having a timing signal generating circuit (328 of Fig. 3) generating a timing control signal

Art Unit: 2615

and a multiplexer (318 of Fig. 3) coupled to the timing signal generating circuit and selectively outputting the signals to be recorded based on the timing control signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide De Haan et al's system with the timing signal generating circuit and the multiplexer as taught by Naimpally since it merely amounts to selecting an alternative equivalent recording method.

9. Claims 26, 40-41, 45 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Haan et al ('641) in view of Enokida ('393) as applied to claims 23-24, 27-31, 33-39, 42-43, 46-50, 52-57 and 59-61 above, and further in view of Official Notice.

The combination of De Haan et al and Enokida discloses all the features of the instant invention except for providing that the digital medium includes a magnetic medium as recited in claims 26 and 45; a calculating circuit for calculating a rotational speed of the motor based on the detected relative position data as recited in claims 40 and 58 and wherein the reproducing unit includes reading heads as recited in claim 41.

The capabilities of recording data on the magnetic disk, controlling the rotting of the recording disk by using a calculating circuit calculating a rotational speed of the motor and reproducing data recorded on the recording medium by using reading heads are old and well known in the art and therefore Official Notice is taken.

It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the well known magnetic disk for recording medium of De Haan et al in order to

Art Unit: 2615

record new data over the old data recorded on the recording medium, to control the rotating of the recording disk by using the well known calculating circuit in order to accurately record/reproduce video signal by controlling the rotating of the recording disk and substitute the well known reproducing unit having reading heads for the reproducing unit of De Haan et al in order to increase the reproducing speed when reproducing data from the recording medium.

Allowable Subject Matter

10. Claims 1-22 are allowed.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2615

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725.

Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

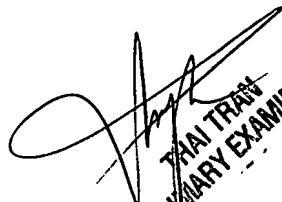
or faxed to:

(703) 308-6306 or (703) 308-6296, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TTQ

October 23, 2000



THAI TRAN
PRIMARY EXAMINER